providing three or more laminae that coupled together collectively define a device or a component of a device;

registering the laminae to define at least one internal lamina, positioned between a first and a second lamina, the at least one internal lamina having a structure and at least one substructure coupled to the structure or another substructure by at least one fixture bridge;

bonding the laminae one to another to form a monolithic device or a component of a device; and

eliminating the fixture bridge prior or subsequent to bonding the laminae.

34. (Twice amended) A method for making an array of devices or an array of components of devices, comprising:

providing plural laminae where at least one of the plural lamina has an array of at least two assemblies, each assembly in the array comprising at least one structure, at least one substructure, and at least one fixture bridge, such that at least one of the structures and at least one of the substructures define a space therebetween, and at least one substructure is coupled to at least one structure by at least one fixture bridge across the space; and

dissociating at least one substructure from the structure to which it is coupled by applying an electrical current across the fixture bridge sufficient to eliminate the fixture bridge, thereby making an array of devices or an array of components of devices.

Please add new claims 65-86.

--65. (New) A method for making a device or a component of a device, comprising:

providing plural laminae that coupled together collectively define a monolithic device or a component of a device, at least one of the lamina having at least one structure, at least one substructure, and at least one fixture bridge, the structure and the substructure defining a space therebetween, and further with the substructure being coupled to the structure by the fixture bridge across the space;

registering the plural laminae;

filling the space between the structure and the substructure with a fixative prior to eliminating at least one fixture bridge;

dissociating the substructure by eliminating the fixture bridge;

eliminating the fixative; and

bonding the plural laminae one to another to form a monolithic device or a component of a device prior to or subsequent to eliminating at least one fixture bridge.

66. (New) The method according to claim 65 where the fixative is a wax.

67. (New) The method according to claim 65 where eliminating the fixative comprises heating the fixative.

68. (New) The method according to claim 65 where the plural laminae define a subsection of a device, and further comprising registering the subsection with at least one additional lamina subsequent to eliminating the fixative.

69. (New) The method according to claim 68 further comprising registering the subsection with plural additional lamina subsequent to eliminating the fixative.

70. (New) A method for making an array of devices or an array of components of devices, comprising:

providing plural laminae where at least one of the plural lamina has an array of at least two assemblies, each assembly in the array comprising at least one structure, at least one substructure, and at least one fixture bridge, such that at least one of the structures and at least one of the substructures define a space therebetween, and at least one substructure is coupled to at least one structure by at least one fixture bridge across the space;

filling the space between each structure and its coupled substructure with a fixative prior to eliminating the fixture bridge;

dissociating at least one substructure from the structure to which it is coupled by eliminating the fixture bridge(s), thereby making an array of devices or an array of components of devices, where dissociating each substructure from the structure to which it is coupled by eliminating the fixture bridge(s) is performed before the plural laminae are registered and bonded; and

eliminating the fixative.

71. (New) The method according to claim 70 wherein the fixative is wax.

72. (New) The method according to claim 70 whereby the fixative is eliminated by heating.

73. (New) A method for making a device or a component of a device, comprising:

providing plural laminae that coupled together collectively define a monolithic device or a component of a device, at least one of the lamina having at least one structure, at least one substructure, and at least one fixture bridge made of a non-refractory material, the structure and the substructure defining a space therebetween, and further with the substructure being coupled to the structure by the fixture bridge across the space; and

dissociating the substructure by eliminating the fixture bridge.

74. (New) The method according to claim 73 where the fixture bridge consists essentially of at least one metal or metal alloy.

75. (New) The method according to claim 73 where at least one lamina includes plural substructures and at least one substructure is coupled to at least one other substructure by a fixture bridge.

76. (New) The method according to claim 73 whereby dissociating the substructure by eliminating at least one fixture bridge comprises applying an electrical potential across the fixture bridge sufficient to eliminate the fixture bridge.

77. (New) The method according to claim 73 whereby dissociating the substructure from the structure by eliminating the fixture bridge comprises:

placing a first electrode on a first substructure to be dissociated;

contacting a structure or substructure coupled to the first substructure with a second electrode; and

applying a current through the first and second electrodes.

78. (New) The method according to claim 77 where at least one of the first and second electrodes comprises a graphite tip.

79. (New) The method according to claim 73 further, comprising:

registering the plural laminae; and

bonding the plural laminae one to another to form a monolithic device prior to or subsequent to eliminating at least one fixture bridge.

80. (New) The method according to claim 79 whereby the method of bonding the plural laminae one to another to form a monolithic device is diffusion bonding, diffusion soldering, thermal brazing, adhesive bonding, thermal adhesive bonding, curative adhesive bonding, electrostatic bonding, microprojection welding, resistance welding, or combinations of these methods.

81. (New) The method according to claim 79 further comprising:

filling the space between the structure and the substructure with a fixative prior to eliminating at least one fixture bridge; and

eliminating the fixative.

82. (New) The method according to claim 81 where the fixative is a wax.

83. (New) The method according to claim 81 where eliminating the fixative comprises heating the fixative.

84. (New) The method according to claim 73 where at least one of the lamina is made from a material selected from the group consisting of metals, metal alloys, polymers, composites, stainless steel, carbon steel or phosphor bronze, and mixtures thereof.

85. (New) The method according to claim 73 where the device is selected from the group consisting of micromechanical systems, microelectromechanical systems, miniature

energy and chemical systems, microthermal systems, microthermomechanical systems, cryocoolers, alpha-Stirling coolers, heat pumps, compressors, thermal compressors, refrigerators, heat engines, valves, nozzled valves, ink-jet print-head valves, fuel cells, fuel combustors, fuel processors, and systems comprising one or more of these devices.

86. (New) The method according to claim 73 where the device or a component of a device is meso-scale.

87. (New) A method for making a micro- or meso-scale device or a component of such a device comprising:

providing three or more laminae that coupled together collectively define a device or a component of a device;

registering the laminae to define at least one internal lamina, positioned between a first and a second lamina, the at least one internal lamina having a structure and at least one substructure coupled to the structure or another substructure by at least one fixture bridge made of a non-refractory material;

bonding the laminae one to another to form a monolithic device or a component of a device; and

eliminating the fixture bridge prior or subsequent to bonding the laminae by applying an electrical potential across the fixture bridge.

88. (New) The method according to claim 87 further comprising:

filling the space between a structure and a substructure with a fixative prior to eliminating the fixture bridge;

dissociating at least one substructure from the structure to which it is coupled by eliminating the fixture bridge; and

eliminating the fixative.--

REMARKS

Claims 1-3, 11-17, 18-22, 24-29, 33-36, 42-44, 46-49 and 50-58 are pending. Applicants have requested that claims 3, 15-17, 36 and 47-49 be cancelled without prejudice. Applicants